

WHAT IS CLAIMED IS:

1. An image input-output apparatus comprising:
reader means for reading an original on an
original table;
5 memory means capable of storing image information;
communication means for communication with another
information processing apparatus through a
communication medium;
print means for printing image data; and
10 control means for selectively executing a copy
mode operation for printing the image data, read by
said reader means, by said print means, a print mode
operation for printing the image data, stored in said
memory means, by said print means, or a read mode
15 operation for storing the image data, read by said
reader means, in said memory means;
wherein said control means is adapted, in said
copy mode operation, to mutually synchronize the
reading operation by said reader means with the
20 printing operation by said print means thereby
transmitting the image data read by said reader means
directly to said print means, and, in said print mode
operation or in said read mode operation, to make
access to said memory means according to the operation
25 of said print means or said reader means.

2. An image input-output apparatus according to

claim 1, wherein said control means is adapted to operate said print means, giving highest priority to said print mode operation and next priority to said copy mode operation.

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3. An image input-output apparatus according to claim 2, wherein said print means is provided at least two output locations for the print result, and said control means is adapted, in case of a request for the copy mode operation in the course of said print mode operation, to interrupt said print mode operation and to execute said copy mode operation if said output location is available in said print means, and said print means is adapted to output the print result of said copy mode operation to said output location.

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4. An image input-output apparatus according to claim 3, wherein said control means is adapted, in case of a request for the copy mode operation in the course of said print mode operation, to execute said copy mode operation after the completion of said print mode operation if said output location is not available in said print means.

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5. An image input-output apparatus according to claim 1, wherein said memory means has an image data memory area for storing the image read by said reader

means, and a print data memory area for storing a print
output image in said print means; and

the memory capacity of said print data memory area
does not exceed the image capacity of one page in said
5 print means.

6. An image input-output method for use in an
image input-output apparatus provided with reader means
for reading an original on an original table, memory
10 means capable of storing image information,
communication means for communication with another
information processing apparatus through a
communication medium, and print means for printing
image data, the method comprising:

15 selectively executing a copy mode operation for
printing the image data, read by said reader means, by
said print means, a print mode operation for printing
the image data, stored in said memory means, by said
print means, or a read mode operation for storing the
20 image data, read by said reader means, in said memory
means; and, in said copy mode operation, mutually
synchronizing the reading operation by said reader
means with the printing operation by said print means
thereby transmitting the image data read by said reader
25 means directly to said print means, and, in said print
mode operation or in said read mode operation, making
access to said memory means according to the operation

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of said print means or said reader means.

7. An image input-output method according to claim 6, wherein said print means is operated with
5 highest priority given to said print mode operation and next priority given to said copy mode operation.

8. An image input-output method according to claim 7, wherein said print means is provided at least
10 two output locations for the print result, and, in case of a request for the copy mode operation in the course of said print mode operation, said print mode operation is interrupted and said copy mode operation is executed if said output location is available in said print
15 means, and said print means is adapted to output the print result of said copy mode operation to said output location.

9. An image input-output method according to claim 8, wherein, in case of a request for the copy
20 mode operation in the course of said print mode operation, said copy mode operation is executed after the completion of said print mode operation if said output location is not available in said print means.

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10. An image input-output method according to claim 6, wherein said memory means has an image data

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memory area for storing the image read by said reader means, and a print data memory area for storing a print output image in said print means; and

the memory capacity of said print data memory area
5 does not exceed the image capacity of one page in said print means.

11. An apparatus provided with a print function
for printing an image specified by print data from an
10 external apparatus and a reading function for reading an original image, comprising:

print function realizing means having a first mode
of realizing said print function with a smaller memory
capacity and a second mode of realizing said print
15 function with a relatively large memory capacity;

discrimination means for discriminating whether
the print of the image specified by the print data from
the external apparatus is to be realized by said first
or second mode; and

20 control means adapted, in case said discrimination means judges that said print is to be realized by said first mode, to allow parallel execution of the print function and the reading function, and, in case that said print is to be realized by said second mode, to
25 inhibit said parallel execution.

12. An apparatus according to claim 11, wherein

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said first mode utilize a banding method, while said second mode secures an area for storing bit image data of a page.

5 13. An apparatus according to claim 11, wherein said discrimination means is adapted, based on the print data from said external apparatus, to judge whether said image print is to be realized by said first or second mode.

10 14. An apparatus according to claim 13, wherein said discrimination means is adapted, if the print data of a page from the external apparatus cannot be stored in a memory, to judge that said image print is to be realized by said second mode.

15 15. An apparatus according to claim 11, further comprising a copy function, and discrimination means adapted, in case of a request for copying in the course of a print job which includes printing of plural pages, to judge whether said print job is to be interrupted based on at least either of a requested copy condition and a status of the apparatus.

20 16. A method for controlling an apparatus provided with a print function for printing an image specified by print data from an external apparatus and

19. A method according to claim 18, wherein said discrimination step is adapted, if the print data of a page from the external apparatus cannot be stored in a memory, to judge that said image print is to be realized by said second mode.

20. A method according to claim 16, wherein said apparatus additionally has a copying function, and said method further comprises a step adapted, in case of a request for copying in the course of a print job which includes printing of plural pages, to judge whether said print job is to be interrupted based on at least either of a requested copy condition and a status of the apparatus.

21. An apparatus provided with a copy function for printing an original image read by reader means and a printing function for printing an image specified by print data from an external apparatus, comprising:

discrimination means adapted, in case of a request for copying in the course of a print job which includes printing of plural pages, to judge whether said print job is to be interrupted based on at least either of a requested copy condition and a status of the apparatus; and

control means adapted, if said discrimination means judges that said print job is to be interrupted,

22. An apparatus according to claim 21, further
5 comprising plural sheet discharge means;

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25. An apparatus according to claim 21, adapted
if the print job is interrupted and the requested
copying operation is executed, to re-start the
interrupted print job after the completion of said
5 copying operation.

26. A method for controlling an apparatus
provided with a copy function for printing an original
image read by reader means and a printing function for
10 printing an image specified by print data from an
external apparatus, the method comprising:

a discrimination step adapted, in case of a
request for copying in the course of a print job which
includes printing of plural pages, to judge whether
15 said print job is to be interrupted based on at least
either of a requested copy condition and a status of
the apparatus; and

a control step adapted, if said discrimination
step judges that said print job is to be interrupted,
20 to interrupt the print job and to execute the requested
copying operation.

27. A method according to claim 26, wherein said
apparatus includes plural sheet discharge means;

25 wherein said discrimination step includes a step
for judging whether the print job is to be interrupted
or not based on the number of the sheet discharge means

5 28. A method according to claim 26, wherein said
apparatus further includes a function for sorting the
printed sheets;

29. A method according to claim 26, further comprising a generation step of generating bit image data based on the print data from the external apparatus;

30. A method according to claim 26, adapted, if
the print job is interrupted and the requested copying
operation is executed, to re-start the interrupted
25 print job after the completion of said copying
operation.